The most extensive damage was done to the various railroads throughout the Territory, and undoubtedly exceeds $1,000,000. Miles upon miles of track and numerous bridges were carried away or damaged. Passenger and freight business was stalled or interrupted for several weeks, and towns and cities were isolated and cut off from supplies and mail. Telegraph wires were prostrated in all directions and local offices were not in direct communication with the terminal cities for over two weeks, although messages were detoured to the principal New Mexico cities over patched wires within a few days after the storm subsided.

At the present writing it is impossible to definitely state the aggregate loss in the cities, towns, and small settlements, or to the farms and ranches throughout the Territory, but it is believed $1,000,000 is a conservative estimate.

The accompanying table shows the daily rainfall of the flooded districts. It will be observed that the precipitation over the entire area approximated two inches on the 29th, the day of the greatest flood disaster, and that the total for the five days was practically four inches, while in the stricken northeast quarter of the Territory six inches occurred within this period.

## NOTES AND EXTRACTS.

### ROYAL METEOROLOGICAL SOCIETY.

We are informed that His Royal Highness the Prince of Wales has graciously consented to become patron of the Royal Meteorological Society.

Those who are familiar with the history of the New England Meteorological Society, its rapid growth and great usefulness, but eventual dissolution, and with other efforts to establish a similar vigorous society in this country and elsewhere, must have wondered why such efforts often came to naught, but the reasons are not far to seek. A society will not live a healthy life unless, like a man, it has plenty of exercise and useful work to do, and funds to pay expenses, and the stimulus that comes from the conviction that it is really accomplishing its work. What is so discouraging as to strive for a mountain top, yet find oneself perpetually laboring along in ravines and valleys. One must have an occasional outlook from a peak in order to feel that he is steadily nearing the summit; every descent into a valley must be made with the assurance that the next greater height will be attained beyond. So with a society of men banded together for a definite purpose, the initial enthusiasm and money will not suffice unless the members can see that progress is being made toward the object in view; the attainment of one point must be followed by striving after another just beyond. Thus it is that the best scientific research is stimulated step by step; one climbs and enjoys each point of view. What use have we for a society that has no special work to prosecute, no great object to attain, no vigorous life?

Happily for the Royal Meteorological Society of London it has done good work, and its leading spirits foresee that there is more yet to be done. A friend familiar with the development of meteorology in England tells us that—

> There has been a good deal of effort made in England since Dr. W. N. Shaw became chief of the weather service to raise the whole tone of meteorological investigation in England. This has taken the form partly in the direction of inducing the government to reorganize the Meteorological Office and spend larger sums on its maintenance, and partly in the direction of raising the standing of the Royal Meteorological Society.
>
> Sir John Eliot is just now working hard to induce the government to consider a plan of cooperation for the whole British Empire in dealing with meteorological observation (see his British Association address) and a good deal of work of this kind is evidently going on behind the scenes. I take it that the fact of the Prince of Wales becoming a patron is a "straw" which shows that some success is being achieved in persuading the government of the importance of the work to be done; there has been in the past and seems likely to be more in the future of cooperation between the Government Meteorological Service and the Meteorological Society. There is usually a good deal of care and inquiry made as to the standing of any society of this kind before a member of the royal family becomes a patron.—*C. A.*

### JOURNAL OF THE METEOROLOGICAL SOCIETY OF JAPAN.

The last number of the Journal of the Meteorological Society of Japan, Tokio, September, 1904, 23d year, No. 9, contains the following announcement:

> The Meteorological Society of Japan, founded in 1882, counts at present more than 260 members. The president of the society is His Excellency Vice-Admiral Viscount Yenomoto. Its organ is the Kishoshushi (Meteorological Journal), of which more than 180 volumes have already been published. The language used in this journal has hitherto been exclusively Japanese; but, in the future, it is intended to insert occasionally articles on Japanese meteorology as well as other scientific matters in English, French, or German.
>
> It is earnestly desired that our readers will favor us with contributions to our journal.

The only article in this number in any European language is by T. Okada, and is entitled "On the underground temperature observations made at Nagoya, Japan." Observations of ground temperature were made at various depths up to twelve meters, for periods varying from ten years for the lesser depths to four years for the greatest. The soil is a mixture of sand and loam, with a surface of sod. The author decides that the diffusivity, which differs widely in different strata, is greatest at a depth of one and one-half to three meters, where it amounts to 0.00899, and that the stratum of invariable temperature is found at about twelve meters.

The remaining articles of the September number, all of which are in Japanese, are as follows:

"On the snow temperature observations made at Sapporo." By K. Abe.

"Fishery and climate in the Inland Sea for the year 1904." By Y. Yamaguchi.

"On the connection between earthquakes and atmospheric pressure." By Hioya.

"On lunar phases and weather." By Seisan.

"Climate and the development of silkworms at Fukuoka and Kanayama in 1904." Kanayama Meteorological Station.

"Notes: Monthly weather review for August."—*F. O. S.*

### WEATHER BUREAU MEN AS INSTRUCTORS.

Mr. James L. Bartlett, Observer, Madison, Wis., gives the following brief outline of the course in meteorology that he will offer at the University of Wisconsin during the second semester of the present college year:

1. The principles of meteorology. The properties and phenomena of the earth's atmosphere, including barometric pressure, temperature, precipitation, fog, dew, frost, clouds, the general circulation of the atmosphere, and general and local storms. The weather and climate of the United States.

2. Explanation of the meteorological apparatus in use at the Weather Bureau office, and instruction in its use. Instruction and laboratory work in taking and recording observations.

3. Instruction in the preparation and use of the weather map, forecasts, and warnings. Laboratory work in drawing isobars and isotherms and in making forecasts of the weather.

Mr. Edward L. Wells, Observer, Boise, Idaho, on October 21 addressed several classes from the public schools of the county. The structure and use of the instruments were explained, the methods of collecting and disseminating meteorological information were described, and methods of forecasting were touched upon, with some reference to the fallacy of long-range forecasting as at present attempted.